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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/602,145

06/24/2003

Charles Donald Montgomery JR.

AFIBU.0102

9904

7590 09/03/2008  
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EXAMINER

ROSE, KERRI M

ART UNIT

PAPER NUMBER

2616

MAIL DATE

DELIVERY MODE

09/03/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

**Application No.**

10/602,145

**Applicant(s)**MONTGOMERY, CHARLES  
DONALD**Examiner**

KERRI M. ROSE

**Art Unit**

2616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 20 June 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☐ Claim(s) 1 and 3-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 12-21 is/are allowed.
- 6) ☒ Claim(s) 1,3,4,8 and 10 is/are rejected.
- 7) ☒ Claim(s) 5-7,9 and 11 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date: _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                        | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date: _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Response to Arguments***

1. Applicant's arguments, see page 6, filed 6/20/2008, with respect to the rejection(s) of claim(s) 1, 3, 4, and 10 under 102 have been fully considered and are persuasive. However, upon further consideration, a new ground(s) of rejection is made in view of Fumagalli et al., supplied by applicant.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 3, 4, 8, and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tancevski (US 2006/0092958) in view of Fumagalli et al. ("A Token Based Protocol...").

In regards to claim 1, Tancevski discloses a network comprising: a plurality of data channels (figure 2 element 24 discloses multiple data channels); a control channel (fig. 2.22 discloses a control channel); tokens which pass between nodes on the control channel (fig. 4.30 discloses a token which is passed on the control channel.); wherein tokens advertise availability of receivers at a destination node and notify a source when a transmission did not succeed (paragraph 27 discloses sending a NACK message when the transmission did not succeed.).

Tancevski is silent wherein nodes evaluate the tokens to determine if a data payload is destined for and simultaneously arriving at that node on one of the data channels.

Fumagalli discloses a “tell-and-go” technique in section 3.2. As described in section 3.2.1 the token is sent on the control channel at the same time data is sent on the data channel, k. Therefore the payload will arrive simultaneously with the token at the destination node.

It would have been obvious to one of ordinary skill in the art at the time of the invention to use the “tell-and-go” method developed by Fumagalli with the network of Tancevski because doing so maximizes bandwidth utilization and minimized latency, as taught by Fumagalli in the abstract section.

In regards to claim 3, Tancevski discloses notifying a source when transmission did not succeed with a NACK in figure 5 and paragraph 27. Further, paragraph 28 indicates each node is kept current about the status of each node and which channels are in use, so a node is notified if a channel it tried to reserve has already been reserved by a different node.

In regards to claim 4, Tancevski discloses the network of claim 1, wherein each node of the network has fewer transmitters and receivers than data channels (Paragraph 27 indicates some or all stations are tunable to only a subset of the channels).

In regards to claim 8, Tancevski and Fumagalli disclose the network of claim 1, wherein tokens comprise subsets each associated to a RX/TX waveband range and are treated collectively during configuration (Fumagalli discloses the token format in section 3.3. The token format includes one bitmap for each node in the rind. Each bitmap includes a bit for each channel and each channel is a separate RX/TX waveband range.).

In regards to claim 10, Tancevski discloses reserving apparently available receivers at downstream nodes without external confirmation. Figure 6 illustrates the table kept by each node to indicate the availability of other nodes and channels. This information is used to reserve

a receiving node. Fumagalli discloses reserving downstream nodes without confirmation in section 3.2.1. When a node wishes to transmit it consults its table of in-use channel. If one seems available the node begins transmitting without confirmation of availability.

***Allowable Subject Matter***

1. Claims 12-21 are allowed.
2. Claims 5-7, 9, and 11 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Art Unit: 2616

Any inquiry concerning this communication or earlier communications from the examiner should be directed to KERRI M. ROSE whose telephone number is (571) 272-0542.

The examiner can normally be reached on Monday through Thursday, 7:00 am - 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Aung MOE can be reached on (571) 272-7314. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Aung S. Moe/  
Supervisory Patent Examiner, Art Unit 2616

/Kerri M Rose/  
Examiner, Art Unit 2616